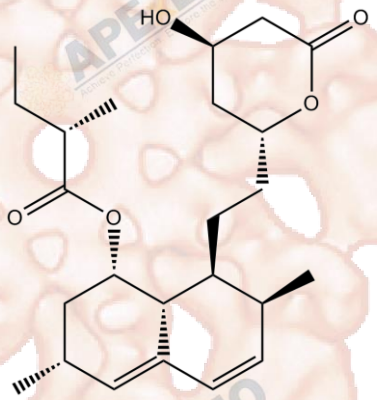
Product Data Sheet

Lovastatin

Cat. No.:	A4365
CAS No.:	75330-75-5
Formula:	C24H36O5
M.Wt:	404.54
Synonyms:	
Target:	Metabolism
Pathway:	HMG-CoA Reductase
Storage:	Store at -20°C



Solvent & Solubility

In Vitro

insoluble in H2O; ⩾18.6 mg/mL in EtOH with ultrasonic; ⩾20.2 mg/mL in DMSO

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	2.4719 mL	12.3597 mL	24.7194 mL
5 mM	0.4944 mL	2.4719 mL	4.9439 mL
10 mM	0.2472 mL	1.2360 mL	2.4719 mL

Please refer to the solubility information to select the appropriate solvent.

Biological Activity

Shortsummary	HMG-CoA reductase inhibitor
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	HeLa, MCF-7 and HepG2 cell lines
Preparation method:	The solubility of this compound in DMSO is >20.2 mg/ml. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	5-1600 μg/ml

	Applications:	Lovastatin, other than its anticholesterol property, has diverse applications in the field of osteoporosis, neuro-degeneration, rheumatoid arthritis, antifungals and also is reported to reduce proliferation of lung cancer cells, breast cancer (MCF-7), liver cancer (HepG2). Lovastatin treatments show significant dose dependent cytotoxic effect on HeLa cells with IC50 value of 160 μg/mL.
In Vivo	**Animal experiment**	
	Animal models:	guinea pig wound chamber model
	Dosage form:	5 microM for 8 d
	Applications:	The ability of lovastatin to induce fibroblast apoptosis in vivo was examined using a guinea pig wound chamber model. Lovastatin (5 microM, 8 d) reduced granulation tissue formation in the wound chambers by 64.7%, with associated ultrastructural evidence of fibroblast apoptosis.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

Product Citations

See more customer validations on www.apexbt.com.

References

[1] Bhargavi S, et al. Purification of Lovastatin from Aspergillus terreus (KM017963) and Evaluation of its Anticancer and Antioxidant Properties. Asian Pac J Cancer Prev. 2016;17(8):3797-803.

[2] Tobert JA, et al. Lovastatin and beyond: the history of the HMG-CoA reductase inhibitors. Nat Rev Drug Discov. 2003 Jul;2(7):517-26.

Caution

FOR RESEARCH PURPOSES ONLY.

NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APExBIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt of the product, follow the storage recommendations on the product data sheet.

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